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TACKIFIER SHEET

[Nen'chakushi]

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[*There are no amendments to this patent.*]

Specification

1. Title of the invention

Tackifier sheet

2. Claim of the invention

A tackifier sheet characterized by the fact that a paint layer that prevents exposure of the tackifier to the air is formed on at least one edge.

3. Detailed description of the invention

The present invention pertains to a tackifier sheet used for electrostatic copying machines, magnetic copying machines, common business applications, etc. In general, a tackifier sheet has a structure comprising a paper top sheet 1, pressure-sensitive adhesive layer 2, and release sheet 3, and printing is done on the surface of the paper top sheet, and the layers are punched to form a desired shape and used mainly for labels, seals, etc. In recent years, a tackifier sheet where the top sheet, pressure-sensitive adhesive, and release sheet are selected to accommodate copying requirements when used as tackifier sheets for PPC have been proposed. However, adhesion of the tackifier to the photosensitive material is observed even when the aforementioned tackifier sheet for PPC is used in some cases, and contamination of the copy or contamination of the machine occur. As a result of much research conducted by the present inventors, they discovered that the tackifier is adsorbed to the photosensitive material as a result of direct contact of the edge of the tackifier layer depending on the contact angle of the edge member of the tackifier sheet and copy contamination results.

The purpose of the present invention is to solve the above-mentioned problem, and to produce a tackifier sheet with an absence of adsorbed tackifier for a wide range of copying machines. In other words, the tackifier sheet of the present invention is a tackifier sheet having paint layer 4 that prevents air exposure of the tackifier 2 on at least one edge of the tackifier sheet as shown in Fig. 2. For the paint used for the tackifier sheet of the present invention, a paint capable of forming a hard layer that does not fall off is suitable. For specific examples of the above-mentioned paints, fiber derivative paints such as nitro cellulose and acetyl cellulose, organic solvent type synthetic resin paints such as thermosetting acrylic resin, phenol

formaldehyde resin, alkyd resin, styrene butadiene resin, and epoxy resin, water-soluble synthetic resin paints such as vinyl acetate, styrene butadiene, and acrylic compounds, etc. can be mentioned, and either a clear paint without a pigment or a paint content white or colored pigment may be used.

[p. 2]

For the top sheet and substrate for the release sheet used in the present invention, high-quality paper, medium quality paper, coated paper, art paper, white rolled paper, kraft paper, etc. can be used.

Furthermore, for the pressure-sensitive adhesive used, those commonly used can be used in this case as well, and for example, water-soluble natural rubber latex, synthetic rubber latex, acrylic resin emulsion, solvent type natural rubber, synthetic rubber, polyisobutyrene, polyvinyl alkyl ether, acrylate copolymers, etc. can be mentioned. For release agents used for the release sheet, standard type can be used in this case as well, and for example, silicon type resin, etc. can be mentioned. In the following, the present invention is explained in further detail with application examples and comparative example.

Application Example 1

An India paper with 42 g/m^2, an acrylic pressure-sensitive adhesive and a release sheet with 50 g/m^2 were used in combination, and a thermosetting acrylic resin was used as the paint layer for the edge member and production of a tackifier sheet was carried out.

Application Example 2

A high-quality paper with 52.3 g/m^2, an SBR type pressure-sensitive adhesive and a release sheet with 55 g/m^2 were used in combination, and an acetyl butyl cellulose acrylic resin

was used as the paint layer for the edge member and production of a tackifier sheet was carried

Comparative Example

A high-quality paper with 52.3 g/m^2, an acrylic pressure-sensitive adhesive and a release sheet with 55 g/m^2 were used in combination, and production of a tackifier sheet was carried out. A copying test was done with the tackifier sheets produced in Application Examples 1 and 2 and the Comparative Example using an electrostatic copying machine made by Fuji Xerox Co., Ltd., copy contamination was evaluated, and the results obtained are shown in the Table I below.

Key:

○ : Absence of copy contamination

x : Copy contamination observed.

	Model FX9200	**Model FX 4800**	**Model FX3500**	**Model FX2830**
Application Example 1	○	○	○	○
Application Example 2	○	○	○	○
Comparative Example	○	x	x	x

4. Brief description of figures

Fig. 1 is a perspective view of a conventional tackifier sheet, Fig. 2 is a perspective view of the tackifier sheet of the present invention, and Fig. 3 is a cross-section view at line A-A' of Fig. 2.

Explanation of codes

1 ... Top sheet, 2 ... Pressure-sensitive adhesive layer, 3 ... Release sheet, 4 ... Paint layer.

Agent: Kiyotaka Sasaki, Patent attorney (8107) and 3 others

Fig. 1

第 1 図

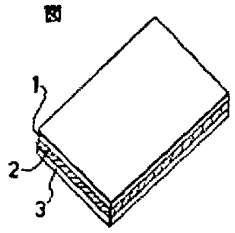

Fig. 2

第 2 図

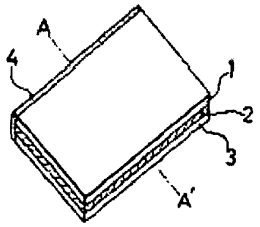

Fig. 3